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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,480	01/23/2004	Naohiko Otake	247954US6	4939
22850 7590 06/20/2008 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER AMADEZ, RODNEY				
ART UNIT		PAPER NUMBER		
2629				
NOTIFICATION DATE		DELIVERY MODE		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/762,480

**Applicant(s)**

OTAKE ET AL.

**Examiner**

RODNEY AMADIZ

**Art Unit**

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/308)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 1, Page 1, lines 16—Page 2, line 2 states “wherein, when a user holds the apparatus with a first hand on the first side and a second hand on the second side, the first hand can access the common button and the cursor key provided on the first side of the apparatus but cannot access the at least one of the alphanumeric keys provided on the second side, and wherein the second hand of the user can access the at least one of the alphanumeric keys provided on the second side of the apparatus, but cannot access the common button and the cursor key provided on the first side.” The phrases “but cannot access the at least one of the alphanumeric keys provided on the second side...but cannot access the common button and the cursor key provided on the first side” are negative limitations that are not supported by the specification. The specification does not state how the user cannot access the at least one of the alphanumeric keys on the second side. For instance, the specification does not mention that the dimensions of the device are large enough to prevent all users from

accessing the at least one of the alphanumeric keys positioned on the second side when the device is held with two hands. The specification does not mention any type of barrier or finger print authorization prohibiting the user to access the at least one alphanumeric key on the second side with the first hand. Therefore, the negative limitations "the first hand...cannot access the at least one of the alphanumeric keys provided on the second side...but cannot access the common button and the cursor key provided on the first side" are not supported by the specification and fails to comply with the enablement requirement.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4.

5. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1, lines 17-19, states "wherein, when a user holds the apparatus with a first hand on the first side and a second hand on the second side, the first hand can access the common button and the cursor key provided on the first side of the apparatus but cannot access the at least one of the alphanumeric keys provided on the second side, and wherein the second hand of the user can access the at least one of the alphanumeric keys provided on the second side of the apparatus, but cannot access the common button and the cursor key provided on the first side". The phrases "but cannot access the at least one of the alphanumeric keys provided on the second side...but cannot access the common button and the cursor key provided on the first side" are negative limitation that are indefinite. These limitations depend upon the size

of a user's hand. In the example where a user has a small hand, the claim limitations will hold true. In the example where a user has a large hand, the claim limitations may not hold true. Therefore, these limitations are indefinite based upon the size of a user's hand.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 5, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Unruh (USPGPUB 2005/0162395—hereinafter Unruh) in view of Dow et al. (US Patent 7,038,717--hereinafter "Dow") and Nakae et al. (USPGPUB 2004/0166829—hereinafter "Nakae").

As to **Claim 1**, Unruh teaches an information processing apparatus (***Fig. 1, 1***), comprising: a display (***2***); a keyboard including alphanumeric keys (***3***) each allocated to one character in a first input mode (***the Examiner interprets the first input mode to be the telephone mode where number characters are used***), wherein at least one of the alphanumeric keys of the keyboard is allocated to more than one character in the second input mode (***Fig. 1, reference number 3 and Pg. 4, ¶' 60 and 61; the Examiner interprets the second input mode as the text mode***) and is provided on a second side of the apparatus (***Fig. 1, note that the alphanumeric keys are on the second side (lower half) of the apparatus***); at least one cursor key (***Fig. 1, note up***

**arrow and down arrow)** configured to select a word generated by a predetermined program (*See Figs. 10-13 and Pg. 6, ¶'s 74-75*), wherein the at least one cursor key is provided on a first side of the apparatus, opposite to the second side, between the display and the keyboard (*Fig. 1, note that the cursor keys are on the top side of the apparatus and note the position of arrow keys in relation to the display and keyboard*); a common button (*space character*) configured to be a determination button to determine the word selected from candidates appearing on the display according to a number of times a selected alphanumeric key is pressed in a second input mode while the predetermined program is activated (*Figs. 7-13 and Pg. 5, ¶ 63 and Pgs. 5-6, ¶'s 71-75—note that the space character is used as the determination button. Also note that Unruh is silent as to the location of the space character*).

Unruh fails to teach the common button configured to be an activation button to activate a predetermined program. Examiner cites Dow et al. to teach a common button configured to be both an activation button to activate a predetermined program and a determination button (*Fig. 1A, Reference Numbers 26, 34, 36 or 38 and Col.3, lines 37-45 and Col. 9, lines 27-40*). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate button reuse as taught by Dow in the information processing apparatus taught by Unruh so that the apparatus may be faster and more convenient to use due to the lack of an enter button (*Dow et al.—Col. 9, lines 35-37*).

Unruh, as modified by Dow, fails to teach that the common button is provided on a first side of the apparatus between the display and the keyboard. Examiner cites Nakae to teach a program activation button (**Fig. 1A, 14c and 14g**) and determination keys (**14d**) located on a first side of the apparatus between the display (**13**) and the keyboard (**14f**—**See Fig. 1—note that both the activation keys 14c, 14g and determination keys 14d constitute a common key as described in the claim limitation**). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to place the common button between the display and the keyboard as taught by Nakae in the information processing apparatus taught by Unruh and Dow, so as to make it convenient for the user to find and comfortable for the thumb to access.

The combination of Unruh, Dow and Nakae yields the operation wherein when a user holds the apparatus with a first hand on the first side and a second hand on the second side, the first hand can access the common button and the cursor key provided on the first side of the apparatus but cannot access the at least one of the alphanumeric keys provided on the second side, and wherein the second hand of the user can access the at least one of the alphanumeric keys provided on the second side of the apparatus but cannot access the common button and the cursor key provided on the first side (**note that by turning the device taught by Unruh, Dow and Nakae on its side (in a horizontal position) the user uses two hands to operate the device wherein the left thumb will operate the common button and cursor keys but cannot access the**

***at least one of the alphanumeric keys and the right thumb will operate the alphanumeric keys but cannot access the common button and the cursor key).***

As to **Claim 5**, Unruh teaches at least one auxiliary input key (***Fig. 1, Reference Number 3, Key 2***) configured to input a first character when the predetermined program is not activated (***inputs the character “2”***) and to input a second character when the predetermined program is activated (***inputs the characters “a”, “b’ or “c”***).

As to **Claim 7**, all of the claim limitations have been addressed with respect to Claim 1. (***See Claim 1 and note that the combination of Unruh, Dow and Nakae yields the structure of Claim 7***).

As to **Claim 8**, Unruh teaches that in the second input mode, a single letter is selected by the at least one of the alphanumeric keys allocated to more than one character, and in response to the single letter selected by the at least one of the alphanumeric keys, the predetermined program generates a list including a single word and a group of words configured to be selected by the common button (***Unruh—Fig. 7 and Pg. 5, ¶ 71, note that the “6 mno” key is activated and in response the predetermined program generates a list including a single word “in” and a group of words, “go” and “im”, configured to be selected by the common button***).

8. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Unruh, Dow and Nakae as applied to claims 1, 5, 7 and 8 above, and further in view of Mak (USPGPUB 2004/0085289—hereinafter “Mak”).



As to **Claim 2**, Unruh, as modified by Dow and Nakae, fails to teach a pointing device configured to move a pointer appearing on the display in a desired direction, wherein the pointing device is adjacent to the common button. Examiner cites Mak to teach a pointing device (**Fig. 3, joystick 310**) configured to move a pointer (**110**) appearing on the display in a desired direction (**Pg. 3, ¶'s 37-38**). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to include a pointing device as taught by Mak in the information processing apparatus taught by Unruh, Dow and Nakae, so as to obtain greater control of the pointer.

Unruh, as modified by Dow, Nakae and Mak, discloses that the pointing device is adjacent the common button, since the pointing device taught by Mak is located below the display (**Mak—Fig. 3**) and the common button is taught by Nakae to be between the display and the keyboard (**Nakae—Fig. 1A**).

As to **Claim 3**, Unruh teaches the at least one cursor key including a plurality of cursor keys (**Unruh—Fig. 1, note "up" and "down" arrows**). Unruh, as modified by Dow and Nakae; however, fails to teach the cursor keys arranged around a perimeter of the pointing device and the common button is arranged outside a perimeter of the plurality of cursor keys. Examiner cites Mak to teach a plurality of cursor keys (**Mak—Fig. 3, 306a, 306b, 308a and 308b**) arranged around a pointing device (**Fig. 3, 310**). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to arrange the cursor keys around the perimeter of the pointing device as taught by Mak in the information device taught by Unruh, Dow and Nakae in order to make it easier for the user to use the same finger to navigate the display.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Unruh, Dow and Nakae as applied to claims 1, 5 and 7 above, and further in view of Harada et al. (U.S. Patent 6,072,647—hereinafter “Harada”).

As to **Claim 4**, Unruh, as modified by Dow and Nakae, fails to teach a switch button configured to switch a direction of the display, wherein the switch button is adjacent to the cursor key. Examiner cites Harada to teach a switch button (**Fig. 9, Reference Number 65B**) configured to switch a direction of the display (**Col. 11, lines 19-30**), wherein the switch button is adjacent to a cursor key (**Fig. 9, note switch key 65B adjacent cursor key 80A**). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate the use of a switch button as taught by Harada in the information processing apparatus taught by Unruh, Dow and Nakae in order to display an image in portrait or landscape (**Col. 13, lines 17-21**).

10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Unruh, Dow and Nakae as applied to claims 1, 5 and 7 above, and further in view of Shiono et al. (USPGPUB 2005/0188001—hereinafter “Shiono”) and Fleck et al. (U.S. Patent 6,977,811—hereinafter “Fleck”).

As to **Claim 6**, Unruh, as modified by Dow and Nakae, fails to teach a mouse button set, including a center button configured to scroll a screen appearing on the display; a left button configured to operate as a first function button; and a right button

configured to operate as a second function button. Examiner cites Shiono to teach a mouse button set (**Fig. 3, Reference Numbers 23A-C**), including a center button configured to scroll a screen appearing on the display (**Fig. 3, Reference Numbers 23C and Pg. 2, ¶ 47**); a left button configured to operate as a first function button (**23A and Pg. 2, ¶ 47**); and a right button configured to operate as a second function button (**23B and Pg. 2, ¶ 47**). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate the use of a mouse button set as taught by Shiono in the information processing apparatus taught by Unruh, as modified by Dow and Nakae, in order to add functionality to the apparatus.

Unruh, as modified by Dow, Nakae and Shiono, also fails to teach that the mouse button set is located near an opposite end from the common button and the cursor key in an axial direction of a hinge pin between the display and the keyboard. Examiner cites Fleck to teach an information processing apparatus to teach that a mouse button set (**Fig. 3, 310 and 312**) is located at an opposite end from a hot button (**"desktop" button—similar to a common button**) and cursor keys (**302, 304, 306 and 308**) in an axial direction of a hinge pin (**See Fig. 1**) between the display and the keyboard (**See Fig. 1**). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to arrange the mouse button opposite the common button and cursor keys as taught by Fleck in the information processing apparatus taught by Unruh, as modified by Dow, Nakae and Shiono, in order to add functionality to the apparatus when using the left hand to operate the display (**Col. 6, lines 8-17**).

***(Please note that although Unruh is described as a mobile phone that it is not limited only to mobile phones. Other devices such as PDA's and computers may be used (Unruh—Pg. 4, lines 1-6). Therefore the combination of Unruh with Fleck is appropriate.)***

11. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Unruh, Dow and Nakae as applied to claims 1, 5, 7 and 8 above, and further in view of Blumberg (U.S. Patent 6,799,303--hereinafter "Blumberg").

As to **Claim 9**, Unruh, as modified by Dow and Nakae, fails to teach that the alphanumeric keys include individual keys corresponding to each letter in the English alphabet in the first input mode. Examiner cites Blumberg to teach alphanumeric keys including individuals keys corresponding to each letter in the English alphabet in the first input mode (***See Fig. 31a and 31b***). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate the use of English alphabet letterings in the first input mode as taught by Blumberg in the information processing apparatus taught by Unruh, as modified by Dow and Nakae, in order to add functionality by increase typing speed (***Blumberg—See Abstract***).

### ***Response to Arguments***

12. In response to applicant's argument that the combination of Unruh, Dow and Nakae does not teach the limitation "wherein, when a user holds the apparatus with a first hand on the first side and a second hand on the second side, the first hand can

access the common button and the cursor key provided on the first side of the apparatus but cannot access the at least one of the alphanumeric keys provided on the second side, and wherein the second hand of the user can access the at least one of the alphanumeric keys provided on the second side of the apparatus, but cannot access the common button and the cursor key provided on the first side", a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Because the claim limitation is dependent upon the size of a user's hands, the combination of Unruh, Dow and Nakae can be operated in the manner recited by claim 1, when positioned horizontally and used by a user with small hands.

13. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., regarding the references not teaching that a user would be able to access certain buttons without moving either hands from the device (See Pg. 8, first paragraph) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hidaka	U.S. Patent 5,606,712
Lenchik et al.	U.S. Patent 6,658,272
Lenchik et al.	U.S. Patent 7,257,430

15. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 7, 2008 has been entered.

***Inquiries***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney Amadiz whose telephone number is (571) 272-7762. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sumati Lefkowitz/  
Supervisory Patent Examiner, Art Unit 2629

/R. A./  
Examiner, Art Unit 2629  
6/11/08